Enabling assertion description in EAD

Background: major revision of EAC-CPF

The topic of assertion description as part of the EAC-CPF revision results from a community request to enable the addition of evidence-based assertions. The suggested solution as implemented in the draft of EAC-CPF 2.0 builds on three existing elements in the <control> section:

- <maintenanceEvent> for capturing who added an assertion when,
- <source> for capturing the source - or "evidence" - for an assertion, and
- <conventionDeclaration> for capturing any rules or convention followed in the formation of an assertion).

In order to make use of these elements appropriately for assertion description, EAC-CPF 2.0 also introduces three new attributes that will allow users to refer back to one or all of the three elements mentioned above from other sections outside of <control>:

- @maintenanceEventReference,
- @sourceReference, and
- @conventionDeclarationReference.

All three of these attributes are optional and have the datatype IDREFS to enable referencing more than one element at the same time.

Furthermore, all elements that use these three attributes have been made repeatable (either in themselves or in the context of their parent elements) in order to allow for additional, differing, or new information to be provided.

Proposal

Seeing that this change uses and refers to shared elements in the <control> section of an EAS instance, it is suggested that EAD will follow EAC-CPF 2.0 and include this change in a new version.

Detailed changes in EAD for the inclusion of assertion descriptions

Sub-elements of <control>

While there are some changes to <conventionDeclaration> and <maintenanceEvent> in EAC-CPF 2.0, these do not result from the new option of including assertion descriptions, which is why they will not be described in any detail in this document here. There are, however, a few changes to how sources can be encoded, which relate to assertion description:

Element/attribute	Suggested change within EAD
<sources>	- **Add** <descriptiveNote> as a optional sub-element of <sources> to align with other plural elements in the <description> section of EAC-CPF

	• **Add** attribute @target (according to the general change in using @target agreed during the EAD Team meeting on 19 March 2021) • **Add** option to include attributes from any other namespace (according to the general introduction of this feature agreed during the EAD Team meeting on 19 March 2021) • **Rename** attribute @lang to @languageOfElement and rename attribute @script to @scriptOfElement • **Review** the use of attributes @altrender and @encodinganalog more generally as part of phase 2 of the EAD revision

\<source\>	• **Remove** \<sourceentry\> and add \<reference\> instead as a required repeatable sub-element
	  ○ Note: \<sourceentry\> has not been required so far, i.e. a transformation script would need to add an empty \<reference/\> where \<sourceentry\> wasn't used
	  ○ Note: \<sourceentry\> includes @transliteration, which will need to be replaced by @conventionDeclarationReference in \<reference\> (see following section of this document)
	• **Add** the new optional and repeatable sub-element \<citedRange\>
	• **Adapt** sequence of sub-elements to \<reference\>, \<citedRange\>, \<descriptiveNote\>, \<objectXMLWrap\>
	• Same comments as for \<sources\> with regard to attributes @target, attributes from any other namespace, @lang, @script, @altrender, and @encodinganalog
	• **Relax** the definition of attribute @lastDateTimeVerified to not be restricted to the year 2099 anymore
	• **Remove** attributes @actuate, @arcrole, and @show from the group of general linking attributes
	• **Add** new optional attributes @valueURI, @vocabularySource, and @vocabularySourceURI

\<citedRange\>	• **Add** as a new optional and repeatable sub-element of \<source\> • Use \<citedRange\> with optional attributes @audience, @id, @target, @languageOfElement, @scriptOfElement, and @unit as well as with the option to include attributes from any other namespace
\<sourceentry\>	• **Remove** the element from EAD

Recommendation

Given that none of the elements and attributes to be added are required and that there can be appropriate replacements for the elements and attributes to be removed*, it is suggested to follow EAC-CPF 2.0 in these changes.

\<source\> in EAD3	\<source\> in future EAD 4.0
```<source id="s12" audience="external" lang="gre" script="Latn" altrender="" encodinganalog="">```	```<source id="s12" audience="external" languageOfElement="gre" scriptOfElement="Latn">```

<table>
<tr>
<td>

```
actuate="onrequest"
arcrole="" show="new"
href="" linkrole="" linktitle=""
lastdatetimeverified="2021">
 <sourceentry id="s123"
 audience="external"
 lang="gre"
 script="Latn"
 transliteration="iso843"

 altrender="" encodinganalog=""/>
</source>
```

</td>
<td>

```
xmlns:xlink="https://www.w3.org/1999
/xlink.xsd"
xlink:actuate="onrequest"
xlink:arcrole="" xlink:show="new"
href="" linkRole="" linkTitle=""
lastDateTimeVerified="2021">
 <reference id="s123"
 audience="external"
 languageOfElement="gre"
 scriptOfElement="Latn"
 conventionDeclarationReference=
 "cD1"/>

</source>
[...]
<conventionDeclaration id="cD1">
 <reference>ISO 843</reference>
</conventionDeclaration>
```

</td>
</tr>
</table>

Sub-elements of <archdesc>

With regard to the sub-elements of <archdesc>, there are two aspects that result from the introduction of assertion description: the removal of the attribute @transliteration and the addition of the optional attributes @conventionDeclarationReference, @maintenanceEventReference, and @sourceReference.

Element/attribute	Suggested change within EAD
@transliteration	● **Remove** the attribute @transliteration ○ In EAD3, @transliteration is currently available in <term>, <sourceentry>, and <relationentry>. <sourceentry> will be removed (see above) and <relationentry> will be replaced by <targetEntity>. Both, <term> and <targetEntity> will have the new attribute @conventionDeclarationReference available. ● **Use** @conventionDeclarationReference instead and point to an appropriate <conventionDeclaration> element within <control> where the system, conventions, or rules applied to transliteration have been specified
@conventionDeclarationReference @maintenanceEventReference @sourceReference	● **Add** as new optional attributes to all non-empty elements within <archdesc>, i.e. (according to the current status and pending potential changes in whether or not elements are removed, replaced or renamed): abbr, abstract, accessRestrict, accruals, acqInfo, address, addressLine, altfFormAvail, appraisal, archRef, arrangement, bibliography, bibRef, biogHist, blockQuote, c, c01, c02, c03, c04, c05,

	c06, c07, c08, c09, c10, c11, c12, chronItem, chronItemSet, chronList, container, controlAccess, corpName, custodHist, dao, daoSet, date, dateRange, dateSet, defItem, descriptiveNote, did, didNote, dimensions, dsc, emph, entry, event, expan, famName, fileplan, footnote, foreign, fromDate, function, genreForm, geogName (now placeName), geographicCoordinates, head, head01, head02, head03, index, indexEntry, item, label, langMaterial, language, languageSet, legalStatus, list, listHead, materialSpec, name, nameGrp, num, occupation, odd, originalsLoc, origination, otherFindAid, p, persName, physDesc, physDescStructured, physDescStructuredSet, physFacet, physLoc, physTech, preferCite, processInfo, ptrGrp, quantity, quote, ref (now reference), relatedMaterial, relations (and its sub-elements), repository, row, scopeContent, script (now writingSystem), separatedMaterial, subject, table, tbody, tgroup, thead, title, toDate, unitDate, unitDateStructured, unitId, unitTitle, unitType, useRestrict

Recommendation

Seeing that there will be appropriate replacement for @transliteration in the two elements of EAD where it is currently used and given that the @...Reference attributes are only optional, it is suggested to follow EAC-CPF 2.0 in these changes in general.

Apart from <control> and any of its sub-elements that only appear there and apart of the empty elements <colSpec>, <lb>, and <ptr>, there are a few elements in EAD, though, that would need confirmation of whether or not they will allow for the @...Reference attributes:

- <archDesc> itself;
  the equivalent in EAC-CPF, <cpfDescription>, includes the @...Reference attributes; however, <cpfDescription> can be repeated, while this is not the case for <archDesc> - and should not be; <archDesc> would hence be more aligned with <multipleIdentities>, which also doesn't include the @...Reference attributes
- <emph>;
  is only used for formatting itself, but as it can include repeated <abbr> and <expan> elements it basically becomes a parent element to a potential group of assertions; however, it might also be argued that it could be sufficient to have the @...Reference attributes with <abbr> and <expan>, but leave it out of <emph>
- <foreign>;
  can contain text (and doesn't have any sub-elements), but do we expect it to be disputed if some part of a descriptive text is in a different language than the surrounding text?

Complete encoding example for assertion description (from Revision notes of EAC-CPF 2.0)

```
<maintenanceHistory>
 <maintenanceEvent maintenanceEventType="updated" id="me2">
  <agent agentType="human">TS-EAS EAC-CPF team</agent>
  <eventDateTime standardDateTime="2021-02-23"/>
 </maintenanceEvent>
 <maintenanceEvent maintenanceEventType="created" id="me1">
  <agent agentType="human">TS-EAS EAC-CPF team</agent>
  <eventDateTime standardDateTime="2019-01-01"/>
 </maintenanceEvent>
</maintenanceHistory>
<sources>
 <source id="source1">
  <reference href="https://www.loc.gov/item/40009284/">History of
  University of Oregon</reference>
  <citedRange unit="page">270</citedRange>
 </source>
</sources>
[...]
<relations>
 <relation sourceReference="source1" mainenanceEventReference="me2">
  <targetEntity targetType="corporateBody"
  valueURI="https://snaccooperative.org/ark:/99166/w63z1x39"
  vocabularySourceURI="https://snaccooperative.org">
   <part>Princeton University</part>
  </targetEntity>
  <relationType valueURI="https://www.wikidata.org/wiki/Property:P69"
  vocabularySourceURI="https://www.wikidata.org/">
  educated at</relationType>
 </relation>
</relations>
```